

IN THE CLAIMS:

Please cancel claims 1-3 without prejudice:

Please amend/replace claims 4, 10, 11, 18, 19, 21, 22 and 26 as follows:

Claim 1. (canceled)

Claim 2. (canceled)

Claim 3. (canceled)

Claim 4. (currently amended) ~~The power supply as in claim 3, further comprising:~~ A power supply, comprising:

a steam engine for providing a first source of power, said steam engine comprising: a combustor; a first heat exchanger configured to receive a heat exhaust of said combustor, said first heat exchanger using said heat exhaust to convert a supply of water into steam, wherein the steam generated by the steam engine is used to drive a turbine of the power supply and said steam engine also producing heat waste;

a thermionic device for providing a second source of power, said thermionic device providing said second source of power from said heat waste, wherein said heat waste of said steam engine is provided to a second heat exchanger of said thermionic device by an exhaust conduit, said exhaust conduit providing fluid communication between said first heat exchanger and said second heat exchanger; and

a third heat exchanger, said third heat exchanger being configured to receive an exhaust of said second heat exchanger, wherein said exhaust of said second heat exchanger is used to preheat a supply of water before it reaches said first heat exchanger.

Claim 5. (original) The power supply as in claim 4, further comprising: a fourth heat exchanger, said fourth heat exchanger being configured to receive an exhaust of said turbine, wherein said exhaust of said turbine is used to preheat a supply of water before it reaches said second heat exchanger.

Claim 6. (original) The power supply as in claim 5, wherein said exhaust of said turbine comprises steam.

Claim 7. (original) The power supply as in claim 6, further comprising:
a water condenser configured to receive an exhaust of said fourth heat exchanger and said water condenser supplies condensed water from said exhaust of said fourth heat exchanger into a tank; and
a pump configured to pump water from said tank into said fourth heat exchanger, said third heat exchanger and said first heat exchanger.

Claim 8. (original) The power supply as in claim 7, wherein said first heat exchanger, said third heat exchanger and said fourth heat exchanger are connected in series for providing said supply of water.

Claim 9. (original) The power supply as in claim 8, further comprising:
a temperature sensor for providing a signal indicative of the temperature of the water being supplied to said tank; and
a controller configured to receive said signal as well as other signals indicative of the operational status of components of the power supply, wherein said controller provides a plurality of output signals for controlling the operational status of components of the power supply.

Claim 10. (currently amended) The power supply as in claim ~~1~~ 4, wherein said heat waste is generated by said steam engine before, during, and after said steam engine is providing said first source of power.

Claim 11. (currently amended) The power supply as in claim ~~3~~ 4, wherein said second heat exchanger is configured to provide heat to a cathode of said thermionic device.

Claim 12. (original) The power supply as in claim 11, wherein said cathode is located in a housing of said thermionic device and said cathode is separated

from an anode of said thermionic device, wherein said heat provided to said cathode causes electrons to separate from said cathode.

Claim 13. (original) The power supply as in claim 12, wherein a vacuum is disposed between said anode and said cathode.

Claim 14. (original) The power supply as in claim 11, wherein said thermionic device is configured to provide power when a heat source of approximately 1000 degrees Celsius is provided to said cathode.

Claim 15. (original) The power supply as in claim 14, wherein said power supply is configured for use in stationary power plant.

Claim 16. (original) The power supply as in claim 14, wherein said power supply is an auxiliary power unit configured for use in a vehicle.

Claim 17. (original) The power supply as in claim 14, further comprising a power conditioner for receiving and conditioning power generated by said steam engine and said thermionic device.

Claim 18. (currently amended) The power supply as in claim ~~1~~ 4, wherein a plurality of steam engines provide heat waste to a plurality of thermionic devices.

Claim 19. (currently amended) The power supply as in claim ~~1~~ 4, further comprising another heat exchanger, said another heat exchanger providing an inlet and an exhaust of a cooling medium to an anode of said thermionic device, wherein unheated air is supplied to said inlet and air heated by said anode is supplied to said exhaust, said anode being maintained at a temperature differential between a cathode of said thermionic device.

Claim 20. (original) The power supply as in claim 19, wherein said another heat exchanger also provides an exhaust to an inlet conduit of said steam engine.

Claim 21. (currently amended) The power supply as in claim 4, where said heat waste of said steam engine is within a range defined by a lower limit of 500 degrees Celsius and an upper limit of 1,400 degrees Celsius when said steam engine is providing said first source of power.

Claim 22. (currently amended) A power supply, comprising:
a steam engine for providing a first source of power, said steam engine producing heat waste when said steam engine is providing said first source of power, said steam engine comprising:
a combustor for providing a source of heat to a first heat exchanger of said steam engine; ~~and~~
an exhaust conduit providing fluid communication between an exhaust of said first heat exchanger and ~~to~~ a second heat exchanger, said second heat exchanger being configured to provide heat to a thermionic device, said thermionic device providing a second source of power from the heat provided by said second heat exchanger; and
a third heat exchanger, said third heat exchanger being configured to receive an exhaust of said second heat exchanger, wherein said exhaust of said second heat exchanger is used to preheat a supply of water before it reaches said first heat exchanger.

Claim 23. (original) The power supply as in claim 22, where said heat waste of said steam engine is within a range defined by a lower limit of 500 degrees Celsius and an upper limit of 1,400 degrees Celsius when said steam engine is providing said first source of power.

Claim 24. (original) The power supply as in claim 22, further comprising another heat exchanger, said another heat exchanger providing an inlet and an exhaust of air to an anode of said thermionic device, wherein unheated air is supplied to said inlet and air heated by said anode is supplied to said exhaust, wherein said anode is maintained at a temperature differential between a cathode of said thermionic device.

Claim 25. (original) The power supply as in claim 22, wherein said thermionic device provides an initial source of power during a warm up phase of said steam engine.

Claim 26. (currently amended) A method for generating power, comprising:

generating power from a steam engine, said steam engine generating heat exhaust from a first heat exchanger, said first heat exchanger receiving heat from a combustor to heat water into steam to drive a steam turbine; ~~and~~

generating power from a thermionic device, said thermionic device generating power from said heat exhaust received from said first heat exchanger ~~combustor~~, wherein said heat exhaust is routed to said thermionic device after heating water supplied to said first heat exchanger and said thermionic device generates power without increasing the amount of fuel necessary to heat the water into steam to drive said steam turbine, said thermionic device comprising a second heat exchanger for receiving said heat exhaust; and

preheating water supplied to said first heat exchanger by providing a third heat exchanger, said third heat exchanger being configured to receive a heat exhaust of said second heat exchanger and said third heat exchanger is configured to heat water prior to is being supplied to said first heat exchanger.